



STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
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September 14, 2018

**NOTICE OF DETERMINATION**

Applications for Revocation/Reissuance/Modification of the existing National Pollutant Discharge Elimination System (NPDES) permit and a new Aquatic Resource Alteration Permit (ARAP) for the Nashville Quarry in Old Hickory, Tennessee.

**Industrial Land Developers, LLC  
PO Box 150129  
Nashville, TN 37215-0129**

**Nashville Quarry  
771 Burnett Road  
Old Hickory, TN 37138-3911  
NPDES Permit TN0069922  
ARAP Permit NR17MS.009  
Davidson County**

A public hearing was held on July 17, 2018, at DuPont Hadley Middle School in Old Hickory, Tennessee to consider public comments on the applications for the Revocation/Reissuance/Modification of the NPDES permit and issuance of an ARAP permit to alter 0.60 acres of on-site wetlands. The hearing began at 4:00 p.m. CST and lasted until all individuals present wishing to provide oral comments for the record were heard.

The Nashville Quarry proposes to discharge treated mine wastewater and storm water from Outfalls 001, 002 and 003 into unnamed tributaries which flow to the Cumberland River in the Old Hickory community, located in Davidson County, Tennessee. Outfall 001 is an existing discharge point, and Outfalls 002 and 003 will be new discharge points.

According to the Division's most current information, the Cumberland River is fully supporting its designated uses, and thus it is not listed as impaired in the "EPA Approved Final Version Year 2018 303(d) List." Additionally, the Cumberland River is not identified or designated as Exceptional Tennessee Waters or Outstanding National Resource Waters. The Cumberland River has "available parameters" for all parameters of concern that are likely to be present in the effluent that would be discharged from this facility. According to 0400-40-03.06(3)(a), the Division has determined that this activity will result in de minimis degradation to the receiving streams.

Industrial Land Developer's (ILD) proposed activities would result in 0.60 acres of new alterations of wetlands. To mitigate for the proposed impacts, ILD proposes to purchase 1.20 wetland credits from the Swamp Road Mitigation Bank 2 in Rutherford County at a ratio of 2:1 to achieve no net loss of resource value. ILD will continue to buffer around and avoid alterations to 11.11 acres of wetlands (Wetland ID:

A, B, C, D, E & F), the associated stream, and a wet weather conveyance associated with wetland B. Two features that were determined to be wet weather conveyances will be affected by the proposed activities but do not require compensatory mitigation.

Introductory remarks by the hearing officer provided a brief summary of the proposed permitting actions, the purpose of the hearing, a brief description of the hearing procedure and the decision process.

Approximately thirty-nine (39) individuals attended the hearing. Those present included concerned citizens, local public officials, members of the state legislature, representatives of the U.S. Congress, and members of the local news media. Ten (10) individuals offered testimony during the hearing. Copies of environmental studies/assessments/photos and written comments were also submitted. Public comments continued to be accepted until the end of the comment period, August 3, 2018.

The public hearing was preceded by an informal technical session with the public from 1:00-2:30 p.m. CST for discussion and review of the permit applications and plans.

All comments, concerns, emails, etc. received by the Division during the comment period are part of the hearing record and were considered by the Division in making the permit decision.

#### *Comments and Responses*

*Please note that a number of comments (both written and oral) are not included in this document because they: 1) were not directly related to the proposed project, 2) state a belief, opinion, or request that did not specifically ask for a response, 3) require a response without a direct relationship to the project, and/or 4) requested information or involved matters beyond the regulatory authority of the Division.*

Subjects included in the comments and the Division's response follow: (Several of the public comments representing similar concerns and issues are grouped together under specific categories.)

#### Administrative and Non-Permit Action Comments

*A-1) Commenter(s) indicated that having a public hearing and information session on a Tuesday afternoon from 1:00-5:00 p.m. is wrong. People are at work.*

Response: The public hearing began at 4:00 p.m. CST and continued until all individuals in attendance that wished to speak for the record were heard. To the extent practicable the Division attempts to schedule hearings to minimize conflicts with the time and date of other activities (e.g. work, dinner, religious services, school, etc.). However, the Division recognizes that every individual that wishes to be present may not be able to attend; this is one reason why the Division solicits written comments. Written comments are given as much weight as verbal comments received during a hearing and give each commenter more time to develop and organize their comments. This also provides the opportunity to provide unabridged comments, as the time constraints during a hearing often only permit limited oral presentation.

The public hearing format does not allow Division personnel to respond or answer questions during the hearing. To allow the public to review the application, plans and ask questions of the permitting staff, an informal technical session was held prior to the meeting (1:00 - 2:30 p.m. CST). The informal technical session is not a statutory or regulatory requirement, but it is a courtesy extended to

the public to informally address questions concerning pending permit actions. Additional information attained during this informal session may be used by the participants in formulating formal comments for the record.

*A-2) Commenter(s) indicated that the purpose of government is for the general welfare of the public. The Division has an obligation to do things legally, but along with the legal obligation you have discretion. We ask that you use that discretion to limit the scope of the expansion of this company until they prove themselves trustworthy of that expansion. I think my fellow citizens agree with me to this point that they have not done so. Therefore, I ask you to rule against any additional permission of operations by Hoover, any representatives, any subsidiary, or subsequent owners of this property to expand operations on this and surrounding property in the name of the citizens of this community.*

Response: The Division recognizes its legal obligation and has made every effort to assure that the applicant has complied with applicable state law and regulations pertaining to operations under its water quality permits. However, the commenter presumes that the Division has greater discretion with regards to denying a permit than actually exists. The Division can and has asked for additional information as required to demonstrate compliance with the law, regulations and water quality standards and to assure that water quality impacts are minimized to the extent practicable. However, if the applicant provides the required information in support of their application demonstrating the ability to comply with regulatory requirements, then the Division has a statutory and regulatory obligation to issue the permit and has no discretion to deny the permit without cause.

*A-3) Commenter(s) indicated that the use of explosives with the quarry activities is a hazard to the stability of the Old Hickory dam and to individuals at Old Hickory beach due to fly rock and air blasts.*

Response: The U.S. Army Corps of Engineers (USACE) has stated in its technical paper issued March 28, 2016, and its NPDES comments provided April 28, 2016, that "Nashville District analysis indicates that the Dam embankment will be stable and will not fail due to normal quarry blasting operations that are conducted within the limits established by the TN State Code." The existing and proposed water quality permits do not regulate blasting or the use of explosives. Questions or complaints concerning the use or permitting of explosives should be directed to the Fire Marshal's Office in the Department of Commerce and Insurance at 615-741-2241.

*A-4) Commenter(s) indicated that they were concerned with air quality, fumes and odors associated with the asphalt plant.*

Response: The existing and proposed water quality permits do not regulate issues associated with air quality. Questions or complaints concerning the air quality and emissions from the asphalt plant should be directed to Metro Nashville Air Pollution Control at 615-340-5653.

#### Water Quality and NPDES Permit Action Comments

*B-1) Commenter(s) indicated that the existing retention pond is not designed or working properly.*

Response: The existing Treatment Pond 001 meets the design criteria for a 10-year/24-hour precipitation event with a principal/emergency spillway designed for a 25-year/24-hour precipitation event. Permit effluent limits for the facility are a maximum of 40 mg/L for Total Suspended Solids. Since development of the treatment pond, the discharge monitoring reports demonstrate that the

sampled discharges have met permit limits. The highest reported TSS result was 28 mg/L, indicating that Pond 001 does operate as designed.

*B-2) Commenter(s) indicated discharge has undermined, washed out or was causing water to flood over Cinder Road making it impassible during heavy rains. The culvert under Cinder had to be replaced indicating that the retention pond was not designed properly and the volume of water discharged is causing problems with the existing crossing.*

Response: The area in and around the culvert on Cinder Road not only receives drainage from the quarry's discharge, but it also receives a tremendous amount of upstream drainage during heavy rain or flooding events not associated with quarrying activity. On March 8, 2018, Division staff documented that the existing culverts were intact with no obvious evidence of "undermining" of the crossing. Photographs taken during the Pre-mine inspection showed that the existing culverts were partially blocked by debris and sediment. This blockage may have affected the ability of the crossing to pass storm flow which could lead to impoundment and failure of the crossing.

The culverts under Cinder Road have been replaced with a single culvert approximately 34" X 57". The new culvert should help alleviate flooding, provided the culvert is properly maintained. The new culvert under Cinder Road should have a capacity of approximately 50 cubic feet per second (cfs). The largest reported discharge from the pond is 1200 gallons per minute (gpm) or 2.67 cfs, and the treatment structures appear to be functioning correctly based on the sample results reported in the discharge monitoring reports. However, it should be noted that the Division does not have jurisdiction over flooding or county road issues.

*B-3) Commenter(s) indicated the reason that they need more retention ponds is because the water is not held long enough in the existing retention pond and the quarry is having a problem with water quality and is discharging water that is high in solids.*

Response: As evident in the response to comment B-1 the existing treatment pond is working correctly. The discharges have met permit effluent limits and are not discharging high levels of suspended solids. The two new ponds are proposed to control the new drainage areas for the acreage to be permitted across the unnamed tributary from the existing permit area. Pond 002 and 003 will not receive drainage from the current pit or permit area.

*B-4) Commenter(s) asked that once the facility discharges water, can the culvert and all this area under Swinging Bridge Road handle the amount of water?*

Response: The culvert under Swinging Bridge Road is a 36-inch pipe with a concrete headwall. The culvert receives drainage from approximately 66.4 acres. The consulting engineer indicates in the application that the culvert has the capacity to carry the runoff expected from the increased permit area during a 25-year/24-hour storm event.

*B-5) Commenter(s) indicated there is a substantial amount of water that enters the conveyance at Swinging Bridge Road due to the runoff of the auto auction lot and are concerned that the tributary can't handle any additional water and, subsequently, property will flood downstream. This is a different scenario than the first discharge location (Outfall 001) because that water runs over 1.6 miles of farm land and doesn't impact any residential areas.*

Response: Unfortunately, the properties downstream of the quarry's Outfall 003 and Swinging Bridge Road are either within the FEMA 500-year or 100-year floodplain/floodway. A 100-year flood is an event that statistically has a 1% chance of occurring in any given year. A 500-year flood has a 0.2% chance of occurring and a 1,000-year flood, such as what occurred in Middle Tennessee in 2010, has a 0.1% chance of occurring in any given year. If another flood like the one that impacted Nashville in 2010 were to occur, the properties in these FEMA floodplains would likely flood regardless of the quarry being present. However, information available to the Division does not indicate an increased probability of flooding due to the permit action. Additionally, downstream of the Old Hickory USACE dam there is an established regulatory floodway that should lessen the extent of flooding of the Cumberland River during most precipitation events.

*B-6) Commenter(s) indicated the facility discharge flowing under Swinging Bridge Road may pick up additional pollutants.*

Response: The Division concurs that the water may pick up additional pollutants after it leaves the permitted area. However, the NPDES permit can only establish limits on the quality of the water discharged from the site. The permit does not authorize the permittee to violate any applicable water quality standard in the receiving stream.

*B-7) Commenter(s) indicated that the quarry shows a lack of design and understanding in their ability to manage their sediment load. As a board member of the River Landing Homeowners Association, we are extremely concerned about the sediment that will be dumped onto our property.*

Response: During the Division's review of the site plans none of the referenced design problems were identified. As noted in the response to B-1 and B-2, required monitoring indicates that the treatment structures function as designed. During the comment period following the hearing, the commenter did not provide specific information to support the statement concerning design flaws in existing plans or in the plans for the expansion that the Division could have the applicant address. The plans were available for review at the informal technical session and online at the [Water Resources Permits Dataviewer](#). If the new discharge complies with the effluent limitations for Total Suspended Solids as required in the permit, sediment should not be deposited on adjacent properties.

*B-8) Commenter(s) indicated sediment is a pollutant that the quarry is not accounting for and is not managing. This is a great concern to us in our subdivision. They will be dumping this additional sediment into wetlands that are within our community.*

Response: The existing permitted facility has met effluent limitations as established in the current permit and reported on the discharge monitoring reports. Please refer to the response to comments B-1 and B-7.

*B-9) Commenter(s) indicated that the riprap around the existing pond had a dried algae bloom on it from where there had been flooding resulting in standing water.*

Response: The Division is aware of the algae in the riprap spillway channel, and it is not the result of flooding. The algae on the riprap of the spillway is expected if the treatment pond discharges with any regularity. Some algae grow in the treatment structure can be transported to the spillway during precipitation driven discharges. This can result in discoloration of the riprap.

*B-10) Commenter(s) indicated that installing retention Ponds 002 and 003 would result in more flooding because they will be in wetland areas.*

Response: Retention Ponds 002 and 003 are not to be constructed in wetlands. However, discharges from Ponds 002 and 003 will contribute some surface water to the wetland areas adjacent to both the treatment structures and the receiving streams.

*B-11) Commenter(s) was concerned about the levels of hexavalent chromium and chromium found in the southwestern corner of the Phase II Environmental Site Assessment. Specifically, the commenter would like to know what might be found if the boring had been deeper than 60 inches.*

Response: The commenter is correct that total chromium was found above the naturally occurring background levels (20 mg/kg). There is not a regional screening level (RSL) for total chromium. Total chromium did not exceed naturally occurring background levels below a depth of 36 inches. Hexavalent chromium has a residential RSL of 0.3 mg/kg and an industrial RSL of 6.3 mg/kg.

Hexavalent chromium was found only in the top six inches in the surficial soil samples at borehole B07 and was not detected at any of the second interval (24 to 36 inches) or third interval (48 to 60 inches) drill hole depths. Industrial Land Developers has obtained a permit to dispose of the soils with elevated chromium/hexavalent chromium. During the Phase II Environmental Site Assessment (ESA), the boring actually extended to a depth of 23 feet to sample groundwater and elevated levels of chromium were not documented.

*B-12) Commenter(s) indicated that the Cumberland River is part of the water supply for Nashville, and it is very important for any water that's discharged into this river is kept clean and kept secured from pollutants that this type of operation is going to produce.*

Response: The quarry discharge is very unlikely to have an adverse effect on Nashville's water supply. The primary pollutants discharged from the quarry are Total Suspended Solids (TSS) and pH. Discharge monitoring reports indicate compliance with the permit effluent limit of 40 mg/L for TSS and 6-9 standard units (SU's) for pH. The highest reported TSS for a discharge from the site is 28 mg/L, and none of the reported discharges for pH have been less than 6 SU's or greater than 9 SU's. The domestic water supply water quality criterion/standard is 500 mg/L for TSS.

#### Wetland and ARAP Permit Action Comments

*C-1) Commenter(s) indicated the Division offered no rationale or explanation that the arguments or alleged information received "demonstrates" a need for the degradation and permanent loss of the Nashville Quarry wetlands.*

Response: Initially, the applicant proposed an additional 0.26 acres of additional wetland fill in wetland areas B and E. However, the applicant chose to avoid wetland impacts associated with the riparian flood prone area of the stream that transects the site and minimized wetland alterations to the extent practicable. The applicant demonstrated in its application and Alternatives Analysis that the continued operations would result in the eventual collapse and loss of wetlands H and I at some risk to mine personnel and equipment. The preliminary jurisdictional determination submitted deemed feature G a wetland and was accepted by the state during the first permitting of the site. Feature G is not a jurisdictional wetland in the subsequent approved USACE jurisdictional determination but is an

isolated feature. These three features (0.6 acres) do not exhibit a surface connection to the stream that transects the site or the other wetlands on site.

*C-2) Commenter(s) indicated it was their understanding that normally, when wetlands are altered, that you try to keep mitigation within the county in which the wetlands alterations occur.*

Response: Typically, mitigation is preferred to occur as close to the site as practicable. However, if mitigation cannot occur on-site, the mitigation of wetlands are prioritized in accordance with ARAP rule 0400-40-07-.04(7)(b)1. Mitigation is ranked under the following categories 1) restoration, 2) creation, 3) enhancement, 4) preservation and 5) any combination of the above activities. As on-site mitigation and banking within the eight digit hydrological unit code (HUC) was not available to the Nashville Quarry, the most practicable option with the greatest offset of resource value is restoration/banking as prioritized under the ARAP rule 0400-40-07-.04(7)(b)1.(iii).

*C-3) Commenter(s) indicated environmental stakeholders / permit holders often fail to restore wetlands as required by the ARAP.*

Response: The wetland banking instrument from which the permittee is purchasing credits ensures that the mitigation is in place (restored) prior to the alteration of the wetlands proposed and that it is of at least equal resource value to the feature being altered.

*C-4) Commenter(s) indicated they were promised the Nashville Quarry would never take the wetland areas.*

Response: The Division cannot promise that any water or wetland will never be subject to alterations. The ARAP Rules found at 0400-40-07 allow for the alteration of wetlands, provided regulatory requirements and appropriate mitigation, if required, are met. In fact, the June 15, 2016, Notice of Determination (NOD) stated that alterations to wetlands and other waters deemed jurisdictional would require an Aquatic Resource Alteration Permit (ARAP) prior to any alteration of waters. The 2016 NOD is available for review on the [Water Resources Permits Dataviewer](#), and the response in question is on page 4, comment A-6 of that NOD.

*C-5) Commenter(s) indicated that the wetlands in question are fed by the water table and digging up these areas will disrupt the water table.*

Response: The three features proposed for alteration are karst depressional features and are not likely fed by the groundwater table but have precipitation driven hydrology. Two of the features, wetlands H and I, are currently cut off from the groundwater table by the existing quarry as noted in the response to C-1.

*C-6) Commenter(s) indicated that if I were applying for a permit to do something in a wetland, we wouldn't have this meeting. You would just tell me no, right there, wouldn't you?*

Response: Provided that the commenter or any other person submitted a complete application meeting the regulatory requirements with appropriate mitigation (certain activities do not require mitigation) the commenter could be issued an ARAP permit to alter wetlands. A public hearing is held when there is significant interest by members of the public.

Decision

The Division has reviewed the plans, alternatives analysis and conducted the required antidegradation review, including the status of the receiving stream.

The Division has considered available data regarding 303(d) stream listings, Exceptional Tennessee Waters (ETW) and information concerning federal and state listed endangered or threatened aquatic species. The Division required additional site-specific information in the form of Phase I and II Environmental Assessments, which included surface water, soil and groundwater sampling.

The Division responded to both oral and written comments contained in the hearing record. Public participation included the opportunity for review by the Environmental Protection Agency (EPA), United States Army Corps Of Engineers (USACE), United States Fish and Wildlife Service (USFWS), Tennessee Wildlife Resources Agency (TWRA) and the Tennessee Historical Commission, as well as other state and local agencies and individuals who requested to be included on an email or mailing list for public notice announcements.

Based on its review of all relevant data, the Division has determined that the ARAP and NPDES permits comply with applicable statutory and regulatory requirements, are protective of water quality and can be issued.

This permit action may be appealed to the Board of Water Quality, Oil and Gas pursuant to Tenn. Code Ann. § 69-3-105(i) and Tenn. Comp. R. & Regs. 0400-40-05-.12.



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9/13/18  
Date